

# **Blueprint for Instruction and Assessment**

## **Software and App Design**

11.0202.00



Domain	Related Standards	Instructional Time
<b>Domain 1</b> Programming	<b>STANDARD 4.0</b> UTILIZE PRIMITIVE DATA TYPES AND STRINGS IN WRITING PROGRAMS <b>STANDARD 5.0</b> PERFORM BASIC COMPUTER MATHEMATICS IN INFORMATION TECHNOLOGY <b>STANDARD 6.0</b> UTILIZE CONDITIONAL STRUCTURES IN WRITING PROGRAMS <b>STANDARD 7.0</b> UTILIZE ITERATIVE STRUCTURES IN WRITING PROGRAMS <b>STANDARD 8.0</b> UTILIZE BASIC DATA STRUCTURES IN WRITING PROGRAMS <b>STANDARD 14.0</b> UTILIZE AND CREATE COMMUNITY RESOURCES <b>STANDARD 15.0</b> USE VERSION CONTROL SYSTEMS <b>STANDARD 18.0</b> EMPLOY OBJECT-ORIENTED PROGRAMMING TECHNIQUES	50-60%
<b>Domain 2</b> App Design	<b>STANDARD 11.0</b> DEMONSTRATE PROGRAM ANALYSIS AND DESIGN <b>STANDARD 12.0</b> DEVELOP A PROGRAM <b>STANDARD 13.0</b> TEST AND DEBUG TO VERIFY PROGRAM OPERATION <b>STANDARD 17.0</b> USE AND UPDATE DATA STORAGE AND MANAGEMENT <b>STANDARD 19.0</b> EMPLOY RUN TIME AND ERROR HANDLING TECHNIQUES	10-20%
<b>Domain 3</b> Computer Principles	<b>STANDARD 1.0</b> APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS <b>STANDARD 2.0</b> RECOGNIZE SECURITY ISSUES <b>STANDARD 3.0</b> EXAMINE LEGAL AND ETHICAL ISSUES RELATED TO INFORMATION TECHNOLOGY	5-10%
<b>Domain 4</b> Web Design	<b>STANDARD 9.0</b> IDENTIFY INTERNET PROTOCOLS AND OPERATIONS <b>STANDARD 10.0</b> APPLY CLIENT-SIDE INTERNET SOFTWARE <b>STANDARD 16.0</b> APPLY USER DESIGN PRINCIPLES TO INCLUDE WEBSITES AND APPLICATIONS	5-10%

Content domains are bodies of knowledge, skills, or abilities to be taught and assessed. They illustrate the relationship among technical standards, instructional time, and student success on the Technical Skills Assessment. This blueprint corresponds with the technical standards endorsed on January 25, 2018.

